

**METHODS FOR PRE-AUTHENTICATION OF USERS USING ONE-TIME
PASSWORDS**

ABSTRACT OF THE DISCLOSURE

5 A method for communicating passwords includes receiving at a server a
challenge from a authentication server via a first secure communications channel, the
challenge comprising a random password that is inactive, communicating the challenge from
the server to a client computer via a second secure communications channel, receiving at the
server a challenge response from the client computer via the second secure communications
10 channel, the challenge response comprising a digital certificate and a digital signature, the
digital certificate including a public key in an encrypted form, the digital signature being
determined in response to the random password and the private key, and communicating the
challenge response from the server to the authentication server via the first secure
communications channel, wherein the random password is activated when the authentication
15 server verifies the challenge response.

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